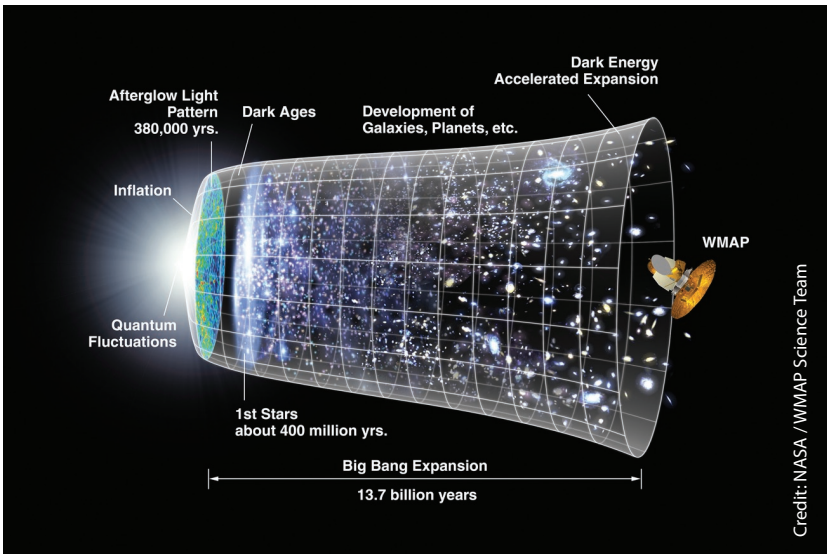
# Dark Energy and the Runaway Universe

## Alex Filippenko

## Jan 28 at 7:30pm

The Rae Dorough **Speakers Series**

Observations of very distant exploding stars show that the expansion of the Universe is now speeding up, rather than slowing down due to gravity as expected. Over the largest distances, our Universe seems to be dominated by a repulsive "dark energy" – an idea Einstein had suggested in 1917, but renounced in 1929, anecdotally as his "biggest blunder." Dark energy stretches the very fabric of space itself faster and faster with time. But the physical origin of dark energy is unknown, and is often considered to be the most important unsolved problem in physics.




### About Alex Filippenko

Alex Filippenko received his Ph.D. in Astronomy from Caltech in 1984 and joined the UC Berkeley faculty in 1986, where he is currently the Richard and Rhoda Goldman Distinguished Professor in the Physical Sciences. Recently elected to the National Academy of Sciences, he is a leading authority on exploding stars, active galaxies, black holes, gamma-ray bursts, and the expansion of the Universe. One of the world's most highly cited astronomers, he has coauthored nearly 600 scientific publications and is the recipient of numerous prizes for his research, most recently the 2007 Gruber Cosmology Prize.

Alex has won the top teaching awards at Berkeley, and students have voted him the "Best Professor" on campus six times. In 2006, he was named the Carnegie/CASE National Professor of the Year among doctoral institutions. The recipient of the 2004 Carl Sagan Prize for Science Popularization, he has appeared in numerous television documentaries, produced introductory astronomy video courses with The Teaching Company, and coauthored an award-winning textbook.

Tickets $30, $12 students 21 and under for each event.

The Rae Dorough Speakers Series is sponsored in part by Lawrence Livermore National Security, LLC

Livermore Valley Performing Arts Center

**Bankhead Theater**

**Tickets: 925.373.6800 or www.bankheadtheater.org**

**2400 First Street, Downtown Livermore**